

Amendments to the Claims

The listing of claims below is intended to replace all prior listings of the claims in the present application.

1. (canceled)
2. (currently amended) A ~~non-human-mammalian rodent~~ recipient to which transplanted with immune cells from a ~~non-human-mammalian rodent~~ donor ~~have been transplanted~~, wherein the donor (a) lacks a gene encoding an antigen protein of an autoimmune disease and (b) develops immune cells, and wherein the recipient (i) is the same species as the donor, (ii) has the same genetic background and/or is immunodeficient, and (iii) following the transplantation, produces an antibody reactive to the antigen protein and/or has activated T cells reactive to the antigen protein.
3. (currently amended) A ~~non-human-mammalian rodent~~ recipient to which transplanted with immune cells from a ~~non-human-mammalian rodent~~ donor ~~have been transplanted~~, wherein the donor (a) lacks a gene encoding an antigen protein of an autoimmune disease; (b) develops immune cells and (c) has been immunized with the antigen protein, and wherein the recipient (i) is the same species ~~to as~~ the donor, (ii) has the same genetic background and/or is immunodeficient, and (iii) following the transplantation, produces an antibody reactive to the antigen protein and/or has activated T cells reactive to the antigen protein.
4. (previously presented) The recipient of claim 2, wherein the recipient is immunodeficient.
5. (previously presented) The recipient of claim 4, wherein the recipient lacks a RAG2 gene.
6. (previously presented) The recipient of claim 2, wherein the immune cells are splenocytes.
7. (previously presented) The recipient of claim 2, wherein the autoimmune disease is pemphigus vulgaris.

8. (previously presented) The recipient of claim 7, wherein the antigen protein is desmoglein 3 protein.

9. (canceled)

10. (currently amended) The recipient of claim 9 2, wherein the rodent is a mouse.

11. (currently amended) A method for producing a ~~non-human mammalian rodent~~ recipient that produces an antibody reactive to an antigen protein for an autoimmune disease and/or has activated T cells reactive to the antigen protein, which comprises the steps of:

(a) immunizing, with the antigen protein for the autoimmune disease, a ~~non-human mammalian rodent~~ donor that (i) lacks a gene encoding the antigen protein and (ii) develops immune cells,

(b) preparing immune cells from the donor, and

(c) transplanting the immune cells to the recipient that (iii) is the same species ~~as to~~ the donor, and (iv) has the same genetic background and/or is immunodeficient, thereby producing a ~~non-human a mammalian rodent~~ recipient that produces an antibody reactive to an antigen protein for an autoimmune disease and/or has activated T cells activation reactive to the antigen protein.

12. (previously presented) The method of claim 11, wherein the recipient is immunodeficient.

13. (previously presented) The method of claim 12, wherein the recipient lacks a RAG2 gene.

14. (previously presented) The method of claim 11, wherein the immune cells are splenocytes.

15. (previously presented) The method of claim 11, wherein the autoimmune disease is pemphigus vulgaris.

16. (original) The method of claim 15, wherein the antigen protein is desmoglein 3 protein.
17. (canceled)
18. (currently amended) The method of claim ~~17~~ 11, wherein the rodent is a mouse.
19. (previously presented) The recipient of claim 3, wherein the recipient is immunodeficient.
20. (previously presented) The recipient of claim 19, wherein the recipient lacks a RAG2 gene.
21. (previously presented) The recipient of claim 3, wherein the immune cells are splenocytes.
22. (previously presented) The recipient of claim 3, wherein the autoimmune disease is pemphigus vulgaris.
23. (previously presented) The recipient of claim 22, wherein the antigen protein is desmoglein 3 protein.
24. (canceled)
25. (currently amended) The recipient of claim ~~24~~ 3 wherein the rodent is a mouse.